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The Orientation of Liquid Crystals of Paraazoxyanisol Occurring with Temperature Gradient and No Correction

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THE ORIENTATION OF LIQUID CRYSTALS OF PARA-
AZOXYANISOL, OCCURRING WITH TEM-
PERATURE GRADIENT AND NO
CORRECTION

G. W. STEWART AND D. O. HOLLAND

The former author has shown by experimentation in para-azoxyanisol that there is a phenomenon of orientation of liquid crystals perpendicular to the direction of the temperature gradient if no convection is present. The interpretation made is that the orientation is caused by the scattering of elastic waves which predominate in the direction of the temperature gradient. Obviously such an experiment requires more complete verification. This the second author has done by photographing the entire diffraction ring produced by the liquid crystal group and by showing that the distribution of the density of the film is in accord with preceding experiments and interpretation.

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A CERTAIN PERSISTENCE OF THE CHARACTER-
ISTICS OF STRUCTURE CARRIED OVER FROM
SOLID TO LIQUID WITH ALKALI
HALIDES.

G. W. STEWART

Through density consideration it is shown that the alkali halides go over into a liquid form which is not random close packing, and evidently differs with body centered cesium halides. There is also a suggestion of a carry-over in aqueous solutions, this taking the form of "super arrangement" of ions in the electrolyte.

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